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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/660,139

09/10/2003

Jing-Hsiang Hsu

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08/09/2005

J C PATENTS, INC.  
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EXAMINER

LUM, LEON YUN BON

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/660,139

Applicant(s)

HSU ET AL.

Examiner

Leon Y. Lum

Art Unit

1641

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 29 June 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

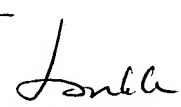
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1 and 3-5.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
LONG V. LE 08/04/05  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

Continuation of 11. does NOT place the application in condition for allowance because: of the reasons set forth in the previous Office Action mailed 29 March 2005. The claim amendments do not alter the scope of the claims and therefore the rejections made in the previous Office Action remain maintained.

With respect to Applicant's arguments in the Remarks filed 29 June 2005, Applicants argue that Nova in view of Cozzette is deficient in rendering claim 1 unpatentable. Specifically, Applicants contend that (1) Nova fails to teach or suggest synthesizing a peptide with a specific amino acid sequence on the aminated surface of the silicon dioxide layer, (2) there is no teaching or suggestion in Cozzette that the permselective silane chemically reacts with the silicon dioxide, which requires a shaking contact between silane and silicon dioxide for an extended period of time as disclosed in the instant application, and not the spin-coating physical phenomena disclosed in Cozzette (3) the permselective silane layer of Cozzette is not on the silicon dioxide layer, (4) there is no contact between the biolayer and the silicon dioxide layer of Cozzette, and (5) Cozzette fails to teach synthesizing a peptide with a specific amino acid sequence on the aminated surface of the silicon dioxide layer because the biolayer and bioactive molecules are not chemically attached to or on the silane-modified surface of the silicon dioxide layer, and that the silicon dioxide layer is not modified with 3-aminopropyltriethoxysilane.

First of all, with regards to issue (1) above, Nova teaches that biological molecules can be placed on a silica matrix, and includes the method of peptide synthesis (see col. 6, lines 54-58), which reads directly on the limitation of "performing a solid-phase peptide synthesis to synthesize a peptide with a specific amino acid sequence" as claimed.

Secondly, with regards to issues (2)-(4), claim 1 simply recites "reacting the silicon dioxide layer with 3-aminopropyltriethoxysilane", and does not require limiting the claim to a shaking contact between silane and silicon dioxide for an extended period of time. Since the shaking contact disclosed in the instant application is itself a physical phenomena and Applicant has not shown that contact between two chemical entities do not result in a chemical reaction, the spin-coating taught by Cozzette fully teaches the claimed limitation. Furthermore, Figure 2 clearly indicates that the biolayer, which can be polypeptides, directly contacts the silane layer, and which directly contacts the silicon dioxide layer. Therefore, since claim 1 recites that an animated surface is the result of 3-aminopropyltriethoxysilane being reacted on top of a silicon dioxide layer, Cozzette clearly teaches this limitation by disclosure of column 9, lines 33-37, column 31, line 1, and Figure 2, and Applicant's arguments with regards to points (2)-(4) are not convincing.

Thirdly, with regards to issue (5), since Nova already teaches peptide synthesis, there is no need for Cozzette to reteach this limitation. In addition, Cozzette clearly teaches 3-aminopropyltriethoxysilane modifying silicon dioxide, as stated in the paragraph above.

Therefore, since Applicant's arguments are not found convincing, the amendments to the claims do not place the application in condition for allowance because of the reasons set forth in the previous Office Action.



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